```
============================================================
Sequence Listing could not be accepted due to errors.
See attached Validation Report.
If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).
Reviewer: Anne Corrigan
Timestamp: [year=2008; month=8; day=19; hr=14; min=59; sec=1; ms=781; ]
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**********************************************************
Reviewer Comments:
<130> CORE0037USA

<150> PCT/US2005/008428
<151> 2005-03-15

Please insert the following above the <150> line:

<140> 10/592,919
<141> 2007-07-31

<210> 9

<220>

<400> 9
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Please remove the above <220>, which does not belong in an intentionally
skipped sequence.

<210> 14
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
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<221> misc_feature

<222> 1-19

<223> Bases at these positions are RNA

<400> 14

cggtcccgtc cgcctctcgt t   21

The above <223> response describing RNA bases is incorrect: t's are at
locations between 1 and 19: t's are not RNA bases.

<210> 15

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide

<220>

<221> misc_feature

<222> 4

<223> N = tetrafluoroindole

<400> 15

ctgntagcct ctggatttga   20

FYI: "n" can only represent a single nucleotide, nothing else. The
above explanation of "n" also appears in subsequent sequences.

****

Application No: 10592919 Version No: 1.0

Input Set:

Output Set:

Started: 2008-08-19 13:54:49.596
Finished: 2008-08-19 13:54:51.806
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 210 ms
Total Warnings: 46
Total Errors: 2
No. of SeqIDs Defined: 48
Actual SeqID Count: 48

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
E 249	Order Sequence Error <210> -> <220>; Expected Mandatory Tag: <211> in SEQID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
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W 213	Artificial or Unknown found in <213> in SEQ ID (16)
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W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

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            Input Set:


            Output Set:



            Started:   2008-08-19 13:54:49.596
           Finished:   2008-08-19 13:54:51.806
            Elapsed:   0 hr(s) 0 min(s) 2 sec(s) 210 ms
     Total Warnings:   46
       Total Errors:   2
No. of SeqIDs Defined:   48
  Actual SeqID Count:   48
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Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22) This error has occured more than 20 times, will not be displayed
E 250	Structural Validation Error; Sequence listing may not be indexable

<110> Michael, T. Migawa
    Walter F. Lima
    Eric E. Swayze
    Joshua Nichols
    Hongjiang Wu
    Thazha P. Prakash
    Tadeusz Krzysztof Wyrzykiewicz
    Balkrishen Bhat
    Stanley T. Crooke

<120> COMPOSITIONS AND METHODS FOR OPTIMIZING
    CLEAVAGE OF RNA BY RNASE H

<130> CORE0037USA

<150> PCT/US2005/008428
<151> 2005-03-15

<150> 60/609,516
<151> 2004-09-13

<150> 60/567,016
<151> 2004-04-29

<150> 60/553,646
<151> 2004-03-15

<160> 48

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<400> 1
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<210> 2
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<220>
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<400> 2
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<210> 3
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<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 3
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<210> 4
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<213> Mus musculus

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cttgacaaag caaacaaaga caaggccaac cgatacttct ctccaaattt taaggtgaaa 1980
ctatacttta caaaaacagt agaggagcca tcaaatccag aggctagcag ttcaacttct 2040
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<210> 5

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 5
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<210> 6
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 6
cgatgcaata aatatgcaca aatca   25

<210> 7
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
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<400> 7
ctgtaaagct ggaaagggac ggactggt   28

<210> 8
<211> 20
<212> DNA
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<220>
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<400> 8
ccttccctga aggttcctcc   20

<210> 9

<220>

<400> 9
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<210> 10
<211> 12
<212> RNA
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<220>
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<400> 10

cgcgaauucg cg   12

<210> 11
<211> 12
<212> RNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 11

gcgcuuaagc gc   12

<210> 12
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 12

cgagaggcgg acgggaccg   19

<210> 13
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> misc_feature
<222> 1-19
<223> Bases at these positions are RNA

<400> 13

cgagaggcgg acgggaccgt t   21

<210> 14
<211> 21
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<220>
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<220>
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<222> 1-19
<223> Bases at these positions are RNA

<400> 14

cggtcccgtc cgcctctcgt t   21

<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
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<220>
<221> misc_feature
<222> 4
<223> N = tetrafluoroindole

<400> 15
ctgntagcct ctggatttga   20

<210> 16
<211> 20
<212> DNA
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<220>
<221> misc_feature
<222> 5
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<400> 16
ctgcnagcct ctggatttga   20

<210> 17
<211> 20
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<220>
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<220>
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<222> 6
<223> N = tetrafluoroindole

<400> 17
ctgctngcct ctggatttga   20

<210> 18
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

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<220>
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<222> 7
<223> N = tetrafluoroindole

<400> 18
ctgctancct ctggatttga                                        20


<210> 19
<211> 20
<212> DNA
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<220>
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<220>
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<222> 8
<223> N = tetrafluoroindole

<400> 19
ctgctagnct ctggatttga                                        20


<210> 20
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<222> 10
<223> N = tetrafluoroindole

<400> 20
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<210> 21
<211> 20
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<220>
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<222> 5
<223> N = N-3-methyl-2'MOE-thymidine

<400> 21
ctgcnagcct ctggatttga                                        20


<210> 22
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<211> 20
<212> DNA
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<223> N = tetrafluoroindole

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<210> 23
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<222> 16
<223> N = tetrafluoroindole

<400> 23
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<210> 24
<211> 20
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<220>
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<222> 15
<223> N = tetrafluoroindole

<400> 24
ctgctagcct ctggntttga   20

<210> 25
<211> 20
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<220>
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<220>
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<222> 14
<223> N = tetrafluoroindole

<400> 25
ctgctagcct ctgnatttga   20

<210> 26
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<220>
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<222> 13
<223> N = tetrafluoroindole

<400> 26
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<210> 27
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<220>
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<222> 5, 15
<223> N = tetrafluoroindole

<400> 27
ctgcnagcct ctggntttga   20

<210> 28
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<220>
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<223> N = N-3-methyl-2'MOE-thymidine

<400> 28
ctgctagcct ctgganttga   20

<210> 29
<211> 20
<212> DNA

<210> 29
<211> 20
<212> DNA
<213> Artificial Sequence

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<220>
<221> misc_feature
<222> 7
<223> N = 2'-ara-fluorothymidine or pseudouridine or
      2'-fluorothymidine or 2-thiouridine or
      2'-S-methylthymidine or 4'-methylthymidine or
      3'-methylthymidine

<400> 29
ctacgcnttc cacgcacagt   20

<210> 30
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> misc_feature
<222> 8
<223> 2'-ara-fluorothymidine or pseudouridine or
      2'-fluorothymidine or 2-thiouridine or
      2'-S-methylthymidine or 4'-methylthymidine or
      3'-methylthymidine

<400> 30
ctacgctntc cacgcacagt   20

<210> 31
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> misc_feature
<222> 9
<223> 2'-ara-fluorothymidine or pseudouridine or
      2'-fluorothymidine or 2-thiouridine or
      2'-S-methylthymidine or 4'-methylthymidine or
      3'-methylthymidine or abasic nucleotide or 2,4-F-tolyl

<400> 31
ctacgcttnc cacgcacagt   20

<210> 32
<211> 20
<212> DNA

<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> misc_feature
<222> 10
<223> 2'-ara-fluorocytidine or abasic nucleotide or
      2,4-F-tolyl

<400> 32
ctacgcttttn cacgcacagt   20

<210> 33
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<220>
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<220>
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<223> abasic nucleotide or 2,4-F-tolyl

<400> 33
ctacgctttc nacgcacagt   20

<210> 34
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
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<220>
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<223> adenine with propyl linker or adenine with butyl
      linker or adenine with pentyl linker or
      tetrahydrofuran or 4-Me-ben

<400> 34
ctacgctttc cncgcacagt   20

<210> 35
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<220>
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<220>

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<221> misc_feature
<222> 13
<223> 2'-ara-fluorocytidine

<400> 35
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<210> 36
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
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<220>
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<222> 14
<223> guanine with propyl linker or tetrahydrofuran or
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<400> 36
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<210> 37
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<220>
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<220>
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<222> 15
<223> 2'-ara-fluorocytidine or cytidine with propyl
      linker or cytidine with butyl linker or cytidine
      with pentyl linker

<400> 37
ctacgctttc cacgnacagt                                           20


<210> 38
<211> 20
<212> DNA
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<220>
<223> Synthetic oligonucleotide

<220>
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<223> N= Tetraflouroindole

<400> 38
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<210> 39
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<212> DNA
<213> Artificial Sequence

<220>
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<220>
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<222> 5
<223> N= Tetraflouroindole or N=
    2,3,4,5-tetraflourophenyl

<400> 39
agttnaggtc tccgatcgtc   20

<210> 40
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
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<222> 6
<223> N= Tetraflouroindole or N=
    2,3,4,5-tetraflourophenyl

<400> 40
agtttnggtc tccgatcgtc   20

<210> 41
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<210> 42
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<400> 42
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<210> 44
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<223> N= Tetraflouroindole

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<400> 47
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<222> 6, 16
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<400> 48
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